

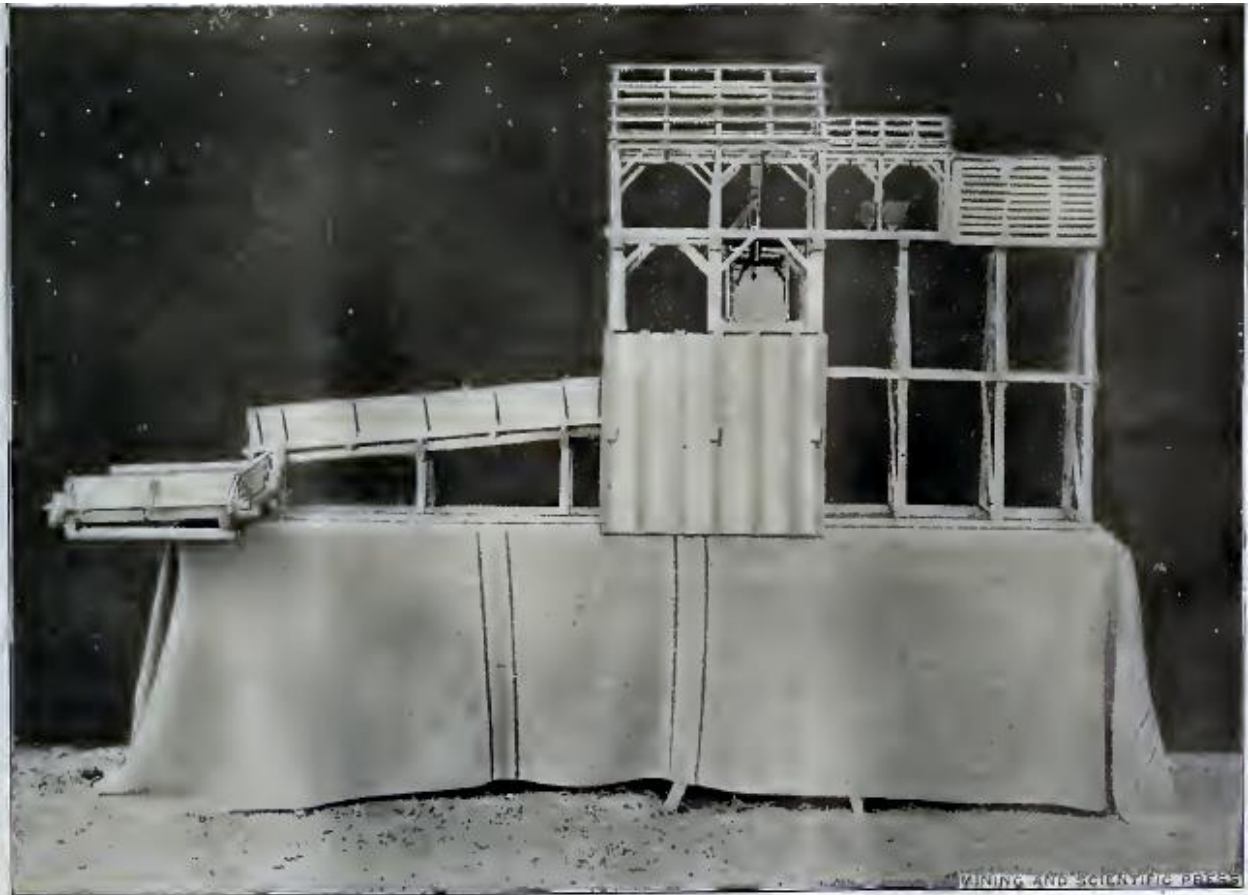
Interesting Mine Model. (Hidden Treasure)

Among the great drift mines of California, the Hidden Treasure Mountain Gate, at Sunnysouth, on the Finest Hill Divide, in Placer county, is one of the most noted. The workings comprise upward of 10 miles of drift and stope, on a series of channels, the exact relations of all of which still remain partly in doubt, but in a general way are understood and are being operated in a systematic and scientific manner. The main working tunnel extends from Sunnysouth for 6 miles under the volcanic capping of andesite tuff and breccia. The gravel is breasted from the working faces and transported in trains of cars by electric locomotives to the surface, where the material is dumped into sluices and washed by water flowing from the mine workings, 300 cubic feet per minute being required. The dump has a daily capacity of 500 tons, though at present but 400 tons are being washed every twenty-four hours. The gravel is first dumped into the head box paved with wooden blocks. Below this is a 12-foot box paved with steel Hungarian riffles. In this short length of box 85% of all the gold obtained is caught, and this is cleaned up daily. This fact alone indicates the free-washing character of the gravel. Below the Hungarian riffles is 1700 feet of flume set on a grade of 14 inches to 12 feet. These boxes are cleaned up at long periods, two or three of the upper sections every two or three months. Little gold is obtained in the lower run of the flume, which is paved throughout with hard, siliceous cobbles taken from the mine workings.

Harold T. Power, general manager of these mines, has had made a model, on a scale of one-twelfth, showing the dumping bins, with automatic dumping arrangement, the apron for diverting the gravel to either of the two upper boxes at the head, and a limited section of the long flume, with an "undercurrent," where the boulders are cut and only the fine material passing the grizzly goes onto the table below. This handsome model of practical mining shows every detail of work in drift, dump house and flume. In the drifts not only the posts and caps of each set, but lagging and even the wedges, are shown. It has been presented by Mr. Power to the California State Mining Bureau, but before being placed on exhibition in the Mining Bureau in San Francisco, it will be taken to the Exposition at St. Louis, Mo. The accompanying engraving gives both a side and end view of the model, a study of which will make its operation clear to those who have no opportunity to see either the mine or the model.



Model of Gravel Washing Plant at Hidden Treasure Mine,
Placer County, Cal.



Side View of Model of Gravel Washing Plant at Hidden Treasure Mine, Placer County, Cal.

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